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<div align="center">REMARKS / DISCUSSION OF ISSUES</div>

Claims 1-32 are pending in the application.

The Examiner is respectfully requested to state whether the drawings are acceptable.

The Office action rejects claims 1-5, 7, 9, 10-12, 14-21, 23, 25-28, and 30-32 under 35 U.S.C. 103(a) over Cuenca et al. ("Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks", IEEE ATM Workshop 1997 Proceedings, pages 168-177, hereinafter Cuenca) and Worrall et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001, pages 197-201, hereinafter Worrall). The applicants respectfully traverse this rejection.

The combination of Cuenca and Worrall does not teach or suggest encapsulating base-layer media packets into network packets of a base layer stream wherein each network packet includes a single base-layer media packet, and encapsulating enhancement-layer media packets into network packets of an enhancement layer stream, wherein multiple portions of the enhancement-layer media packet may be included in the network packets of the enhancement layer stream, as claimed in each of the applicants' independent claims 1 and 17.

As the applicants teach, two fundamentally different strategies are commonly used for encapsulating media packets into network packets: a one-to-one single packet encapsulation, and a many-to-one multiple packet encapsulation. The multiple packet encapsulation is more efficient, but the consequences of a packet loss using this technique are greater. The single packet encapsulation is less efficient, but less affected by a packet loss. Neither Cuenca nor Worrall teach encapsulating packets using a combination of both single and multiple packet encapsulations.

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Conventional packetization schemes, such as Cuenca and Worrall, use a consistent encapsulation technique without regard to the type of media packet being encapsulated. That is, conventionally, when the designer selects either single or multiple packet encapsulation, the selected technique is used for encapsulating all of the media packets. Before the applicants' invention, no one recognized that advantages could be gained by using this mix of single and multiple encapsulation techniques.

Of particular note, Cuenca specifically notes the risk of multiple packet loss when multiple media packets are packed into a network packet:

> "The proposed scheme overcomes the problem that when no provisions are taken to properly pack a hierarchical-encoded [base+enhancement] video stream, the loss of a high-priority ATM cell will result in the complete loss of a group of cells." (Cuenca, 3.1. Packing Scheme Description, page 172.)

Recognizing the consequences of a loss of a multiple packet encapsulation, Cuenca proposes a better way to perform the multiple packet encapsulation for base layer packets. That is, even while addressing the same problem that the applicants address, Cuenca does not even consider using a mix of single and multiple packet encapsulations to solve the problem.

Worrall presents a very detailed analysis of both single packet and multiple packet encapsulations and discusses the relative merits of each different type of packet encapsulation schemes. Even with the pros and cons of each scheme in hand, Worrall does not teach or suggest using a mix of the two:

> "In this paper, mathematical analyses of two RTP packetization schemes [single and multiple packet encapsulations] for low bit-rate MPEG-4 have been presented. For both schemes the theoretical effective error rates were derived, which clearly indicate a preferred scheme. This preferred scheme requires encapsulation of a single video frame within a single RTP packet." (Worrall, "Conclusions", page 201.)

In KSR Int'l. Co. v. Teleflex, Inc., the Supreme Court noted that the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and that it is "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed:

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"Often, it will be necessary … to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements **in the fashion claimed by the patent at issue**. To facilitate review, **this analysis should be made explicit**." KSR, slip op. at 14 (emphasis added).

The Office action asserts that "it would have been obvious to sacrifice the additional bandwidth for a singular packetization scheme in the base layer, which requires enhanced reliability, while maintaining the higher throughput (but reduced reliability) of multiple packets per network packet in the less crucial enhanced layer", but provides no basis for this assertion, other than to repeat this phrase as the apparent motive for combining Cuenca and Worrall. The applicants respectfully maintain that the above assertion is derived from the applicants' specification, because there is nothing in the prior art to support this assertion. Contrarily, Cuenca teaches that the robustness problem of multiple packet encapsulation can be cured by using a more robust technique for performing the multiple packet encapsulation for base layer packets, while Worrall teaches that there is only one preferred encapsulation technique.

One of skill in the art at the time of this invention, with the background knowledge of the conventional techniques for encapsulating packets, would have no apparent reason to combine the competing encapsulation techniques of Cuenca and Worrall in the fashion claimed by the applicants, because, as Worrall's paper plainly indicates, the conventional thinking was that one had to choose between the two different encapsulation schemes to properly perform packetization of media packets, and Cuenca indicates that the robustness problem can be solved by an improved multiple packet encapsulation technique.

Because the combination of Cuenca and Worrall fails to teach a mix of single and multiple packet encapsulation techniques, and because one of skill in the art would have no apparent reason to create a mix of Cuenca and Worrall's teachings in the fashion taught and claimed by the applicants, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 1-5, 7, 9, 10-12, 14-21, 23, 25-28, and 30-32 under 35 U.S.C. 103(a) over Cuenca and Worrall.

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The Office action rejects:

claims 6 and 22 under 35 U.S.C. 103(a) over Cuenca, Worrall, and Rose et al. (USP 7,289,675);

claims 8 and 24 under 35 U.S.C. 103(a) over Cuenca, Worrall, and Hughes Jr. et al. (USPA 2001/0038746); and

claims 13 and 29 under 35 U.S.C. 103(a) over Cuenca, Worrall, and Schulzrinne et al. (RFC 1889, Request for Comments: 1889, January 1996).

Each of these rejected claims are dependent upon independent claim 1 or 13. In this rejection, the Office action relies upon Cuenca and Worrall for teaching the elements of claims 1 and 13. Based on the remarks above regarding the rejection of claims 1 and 13 over Cuenca and Worrall, the applicants respectfully request the Examiner's reconsideration of the above rejections of claims 6, 8, 13, 22, 24, and 29.

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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